



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,432	01/12/2004	Robert Gwathmey Badgett	25669-002 UTIL	2179

30623 7590 09/22/2006

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY  
AND POPEO, P.C.  
ONE FINANCIAL CENTER  
BOSTON, MA 02111

EXAMINER
----------

CHANNAVAJJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
----------	--------------

2166

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/756,432

Applicant(s)

BADGETT ET AL.

Examiner

Srirama Channavajjala

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/18/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-19 are presented for examination.

***Drawings***

2. The Drawings filed on 1/12/2004 are acceptable for examination purpose.

***Information Disclosure Statement***

3. The information disclosure statement filed on 3/18/04 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

***Priority***

4. Acknowledgment is made of applicant's claim for domestic priority based on provisional application No. **60/439,393**, filed on 01/10/2002 under 35 U.S.C. 119(e).

**Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**5. Claims 1-19 are rejected under 35 U.S.C. 101 because invention is directed to non-statutory subject matter.**

**As set forth in MPEP 2106(II)A:**

*Identify and understand Any Practical Application Asserted for the Invention* The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373, 47USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Art Unit: 2166

6. Regarding claim 1, "A method of identifying an evidence-based answer to a clinical question, comprising electronically searching a plurality of scientific publications to yield an answer, wherein said answer comprises search result, at least 10% of said results comprising a randomized controlled trial" is directed to "abstract idea" because all of the elements in the claim 1 would reasonably be interpreted by one of ordinary skill in light of the disclosure at page 4, line 20-32, page 5-14, as software, such that the method is software, per se, is "non-statutory subject matter" and **claim 1** do not have "practical application" because the "final result" by the claimed invention in the claim 1 elements particularly "electronically searching a plurality of scientific publications to yield an answer, wherein said answer comprises search result, at least 10% of said results comprising a randomized controlled trial" merely searching publications but do not produce "useful, tangible and concrete" result, therefore, claim 1 is a non-statutory subject matter. The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a **"useful, concrete and tangible result."** The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application.").

[If] Claims 1 have the result of producing “real-world” results related to “electronically searching a plurality of scientific publications to yield an answer, wherein said answer comprises search result, at least 10% of said results comprising a randomized controlled trial”, however the claim[s] do not specify that the result output is displayed to a user or otherwise used in the real world, but merely says “results comprising a randomized controlled trial”

Upon reviewing the specification, examiner found that there is no support for **“at least 10% of said results comprising a randomized controlled trial” [claim 1-4]**

The claims 2-4 dependent from claim 1 is also rejected in the above analysis.

7. Regarding, claim 5, “A method of formulating a database search, the method comprising:

prompting for search terms in any of a plurality of categories;

prompting for selection of at least one relevant subject matter;

automatically associating synonyms of received search terms, if any, with the received search terms, the synonyms being predetermined to be relevant to the associated search terms; and  
automatically associating search criteria and subject matter terms with received indicia, if any, of at least one desired subject matter” is directed to “abstract idea” because all of the elements in the claim 1 would reasonably be interpreted by one of ordinary skill in light of the disclosure at page 4, line 20-32, page 5-14, as software, such that the method is software, per se, is “non-statutory subject matter” and **claim 5** do not have “practical application” because the “final result” by the claimed invention in the claim 5

Art Unit: 2166

elements particularly “automatically associating synonyms of received search terms, if any, with the received search terms, the synonyms being predetermined to be relevant to the associated search terms; and automatically associating search criteria and subject matter terms with received indicia, if any, of at least one desired subject matter” merely associated search terms and search criteria but do not produce “useful, tangible and concrete” result, therefore, claim 5 is a non-statutory subject matter. The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a ***“useful, concrete and tangible result.”*** The **Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility** states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”).

Claims 5 have the result of producing “real-world” results related to “automatically associating synonyms of received search terms, if any, with the received search terms, the synonyms being predetermined to be relevant to the associated search terms; and automatically associating search criteria and subject matter terms with received indicia, if any, of at least one desired subject matter”, however the claim[s] do not specify that

Art Unit: 2166

the result neither output , displayed nor stored to a user or otherwise used in the real world.

The claims 6-13 dependent from claim 5 is also rejected in the above analysis.

**For “General Analysis for Determining Patent-Eligible Subject Matter”, see 101 Interim Guidelines as indicated below.**

**<<<http://www.uspto.gov/web/offices/pac/dapp/ogsheet.html>>>**

No new matter should be entered

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. At page 16, claim 1, the limitation “at least 10% of said results comprising a randomized controlled trial” is not described in the specification. Upon reviewing the specification, examiner found that there is no support for **“at least 10% of said results comprising a randomized controlled trial”**  
**[claim 1-3]**



The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At page 16, claim 1, line 6-7, it is not clear what is meant by "at least 10% of said results comprising a randomized controlled trial", for compact prosecution, examiner assumes search results organized based number of keywords found in documents or publications and is tread as above in the office action.

Simillary claims 2-4 are rejected in the analysis above.

No new matter should be entered

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

***12. Claims 1-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Melmon et al. [hereafter Melmon], US Pub.No. 2002/0169771 published on Nov 14, 2002.***

13. As to claim 1, Melmon teaches a system which including 'a method of identifying an evidence-based answer to a clinical question comprising electronically searching a plurality of scientific publications to yield an answer ' [page 2, col 2, 0014, page 4, col 2, 0046, page 6, col 1, 0061, col 2, 0062, fig 3A-3B]], Melmon is directed to searching multiple resources of medical information, more specifically, searching databases that including evidence-based medicine resources, clinical guidelines and like as detailed in page 2, col 2, 0014, page 4, col 2, 0046], furthermore, user interface allows users to use keywords or search terms [see fig 3Aelement 50 for particular subject matter or specific document[s] of interest as detailed in fig 3A, it is also noted that Melmon specifically suggests search performed on query terms for example related to "medical field" and answers returned as "hits" as detailed in fig 3B for example from text book, drug information, medicine, guidelines, journals, and like as detailed in fig 3B, 'wherein said answer comprises search results, at least 10% of said results comprising a randomized

Art Unit: 2166

controlled trial' [page 7, col 1, 0066-0067, fig 3F-3J], Melmon specifically teaches MEDLINE resources displaying as hyperlink element 92, further, fig 3F is directed to "randomized controlled trial" information about user specific query "mild-to-,moderate Asthma", therefore, user can select from available articles or journals to review for example as detailed in fig 3H.

14. As to claim 2-3, Melmon disclosed 'wherein at least 10% of said results of a broad search comprise an evidence level of 3 or above' [page 9, 0080].

15. As to claim 4, Melmon disclosed 'wherein the usefulness of said search results is at least 10 points higher compared to a standard MEDLINE/PubMed search' [page 6, col 2, 0062].

16. As to claim 5, Melmon teaches a system which including 'a method of formulating a database search' [fig 3A], Melmon specifically teaches user interface to enter "database search terms" as detailed in fig 3A;

'prompting for search terms in any of a plurality of categories' [fig 3A, page 5, col 2, 0056], Melmon specifically teaches user can select or use checkbox for desired categories as detailed in fig 3A;

'prompting for selection of at least one relevant subject matter' [page 6, col 2, 0064, line 15-21], Melmon specifically teaches relevant subject matter relevant to the query terms found in specific journal or medicine textbook as detailed in fig 3D;

'automatically associating synonyms of received search terms, if any, with the received search terms, the synonyms being predetermined to be relevant to the associated search terms' [page 5, col 2, 0057, line 19-26, page 6, col 1, line 1-8], Melmon specifically teaches both search terms and synonym expressions to the relevant query as detailed in page 5, 0057];

'automatically associating search criteria and subject matter terms with received indicia, if any, of at least one desired subject matter' [page 6, col 1, 0061, fig 3A-3G], Melmon specifically teaches search terms permits to retrieve relevant subject matter from various resources for example MEDLINE, textbooks, journals and like as detailed in fig 3A-3G.

17. As to claim 6, Melmon specifically teaches 'combining the received search terms and the associated synonyms, if any, with the search criteria and the subject matter terms, if any' [page 5, col 2, 0057, line 19-26, page 6, col 1, line 1-8].

18. As to claim 7, 16, Melmon disclosed 'combining comprises associating the terms and the criteria through Boolean logic to form a search string [fig 3A, 3D, page 5, col 2, 0057, line 19-26], Melmon specifically teaches Boolean logic to form query expressions as detailed in fig 3D, page 5, col 2, 0057, line 19-26..

Art Unit: 2166

19. As to claim 8, Melmon disclosed 'analyzing the search string in association with characteristics of a searchable database to determine a URL associated with the searchable database corresponding to the search string' [page 6, col 2, 0063].

20. As to claim 9, 15, Melmon disclosed 'wherein the categories include a patient problem, intervention/treatment, comparison, and outcome' [page 6, col 2, line 15-21]

21. As to claim 10-11, 17, Melmon disclosed 'wherein the at least one relevant subject matter includes clinical area' [page 7, col 1, 0066].

22. As to claim 12, 18, Melmon disclosed 'prompting for selection of a desired search breadth' [fig 3K], especially search query as detailed .

23. As to claim 13, 19, Melmon disclosed 'prompting for selection of a desired patient age limit' [page 8, col 2, 0078].

Art Unit: 2166

24. As to claim 14, Melmon teaches a system which including 'a method of identifying an evidence-based answer to a clinical question using a search engine' page 2, col 2, 0014, page 4, col 2, 0046, page 6, col 1, 0061, col 2, 0062, fig 3A-3B]], Melmon is directed to searching multiple resources of medical information, more specifically, searching databases that including evidence-based medicine resources, clinical guidelines and like as detailed in page 2, col 2, 0014, page 4, col 2, 0046], furthermore, user interface allows users to use keywords or search terms [see fig 3Aelement 50 for particular subject matter or specific document[s] of interest as detailed in fig 3A, it is also noted that Melmon specifically suggests search performed on query terms for example related to "medical field" and answers returned as "hits" as detailed in fig 3B for example from text book, drug information, medicine, guidelines, journals, and like as detailed in fig 3B;

'combining search terms and criteria entered by a user of the search engine to define a desired search' [page 5, col 2, 0055, fig 3A-3C], Melmon specifically teaches user entering query terms through user interface as detailed in fig 3A-3C;

selecting synonyms for the search terms and combining the synonyms with the search terms' [page 5, col 2, 0057, 19-26, fig 3A], Melmon specifically teaches entering user specific search query, also constructing Boolean expressions and synonym expansions to cover alternative word or spellings as detailed in page 5, col 2, 0057;

' searching a plurality of publications associated with the combination of search terms and synonyms to achieve a desired outcome' [page 6, col 1, 0058, line 12, 0061, fig 3A], Melmon specifically teaches user selecting number of resources for example as

Art Unit: 2166

detailed in fig 3A, element 54 that including bibliographics, medical journals and like as detailed in fig 3A;

'returning to the user at least one randomized controlled trial pertinent to the desired search as a search result' [fig 3B-3D, page 6, 0062-0063], Melmon specifically teaches search results displayed to the users as detailed in fig 3B-3C.

### ***Conclusion***


The prior art made of record

- a. US Publication. No. 2002/0169771

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc  
*Patent Examiner.*  
September 6, 2006.

  
SRIRAMA CHANNAVALJALA  
PRIMARY EXAMINER